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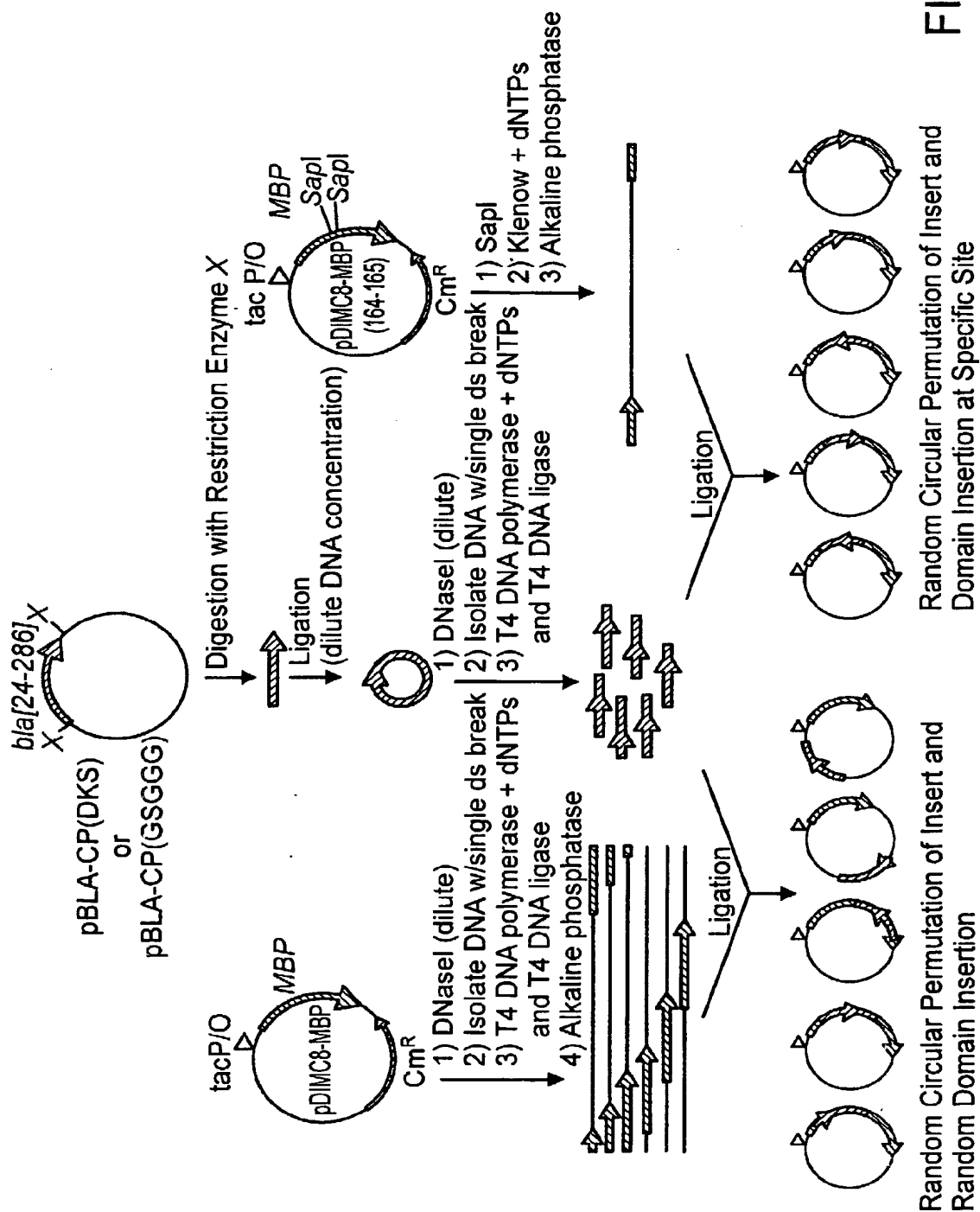
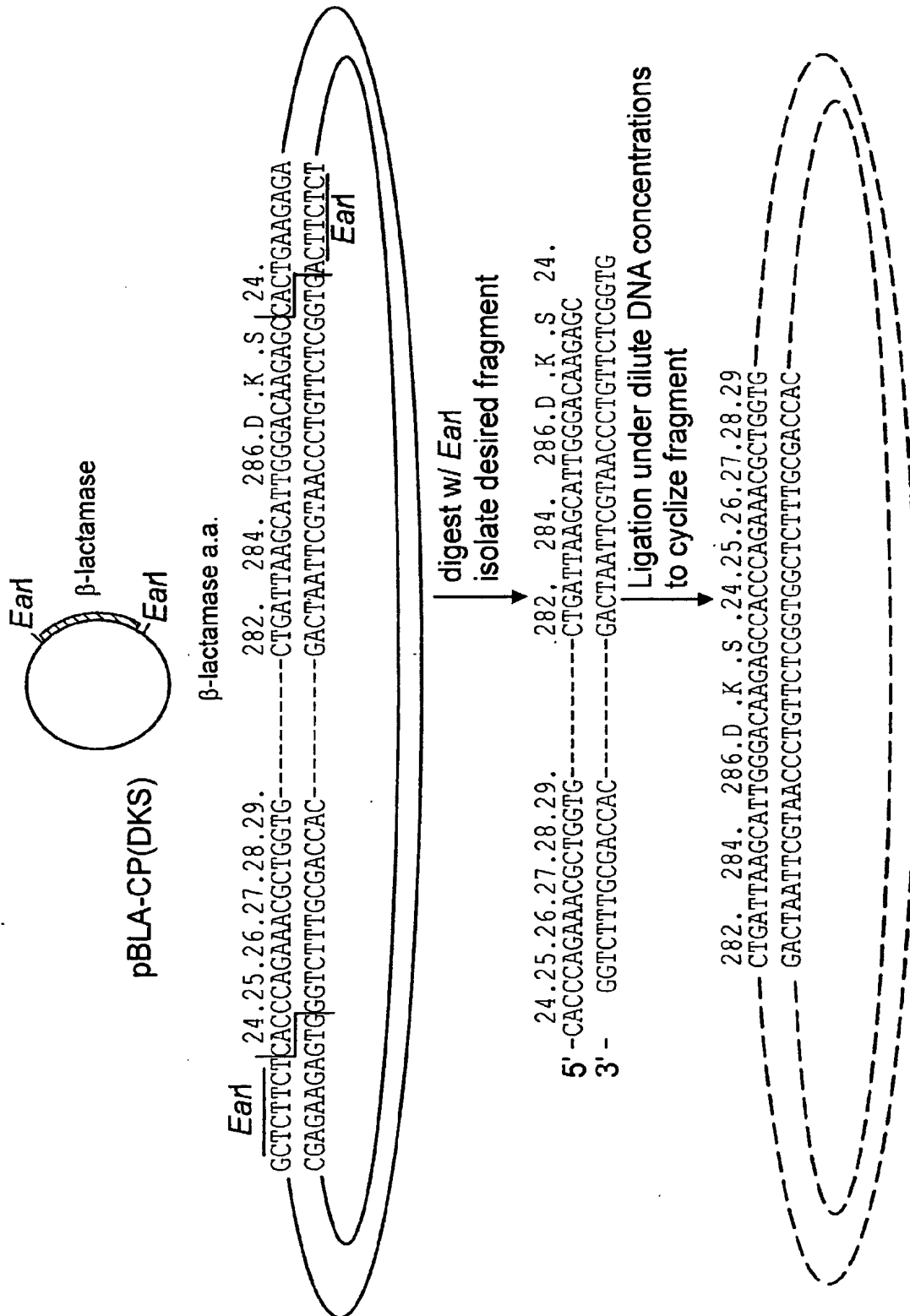
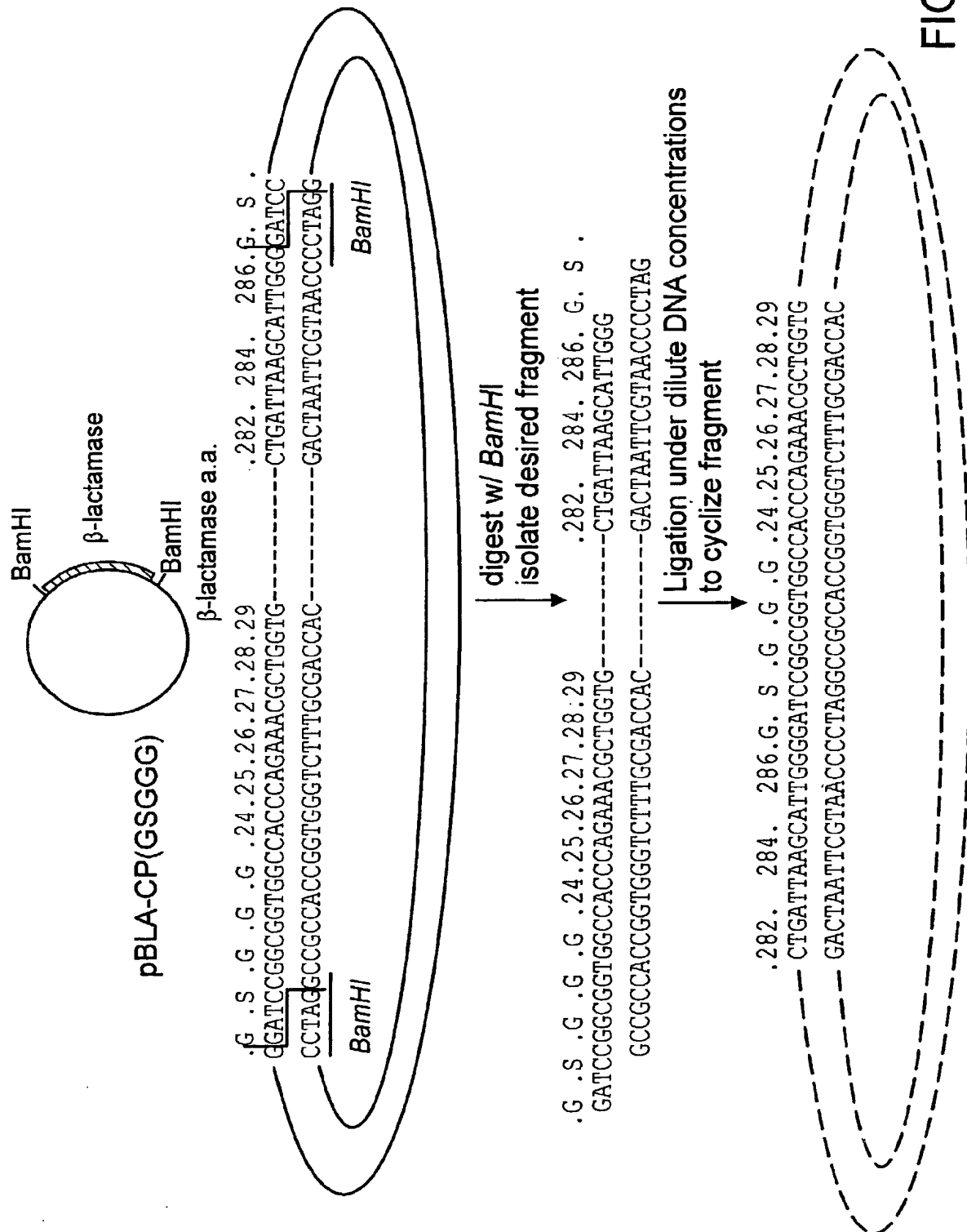


FIG. 1



**FIG. 2**



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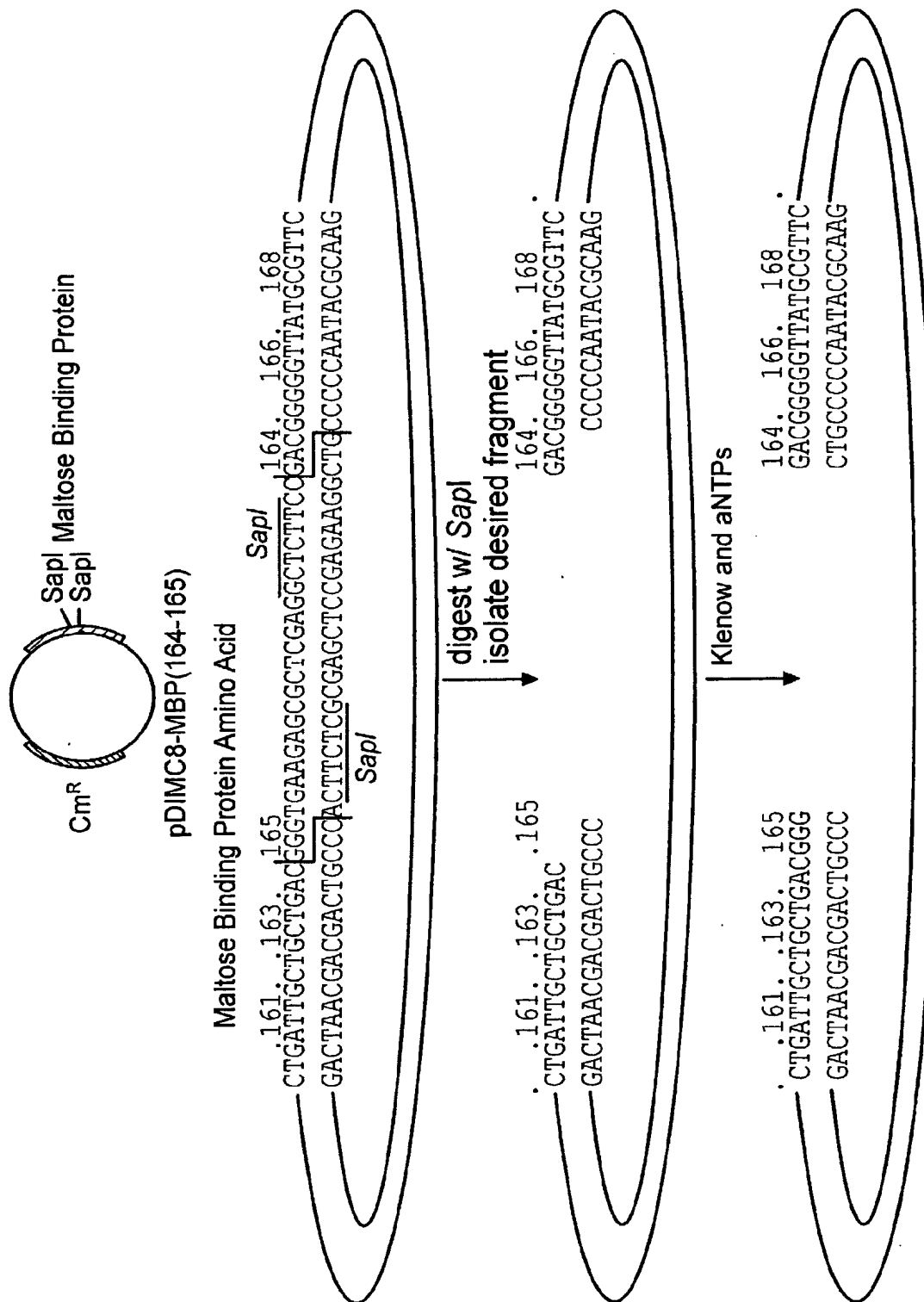


FIG. 4

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FIG. 5A Gene Transcription

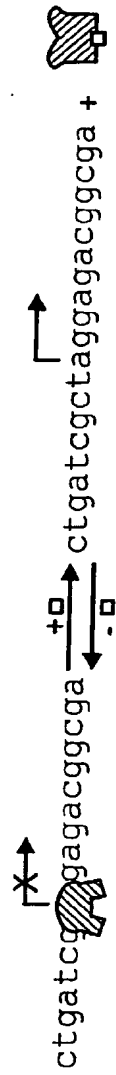


FIG. 5B Signal Transduction

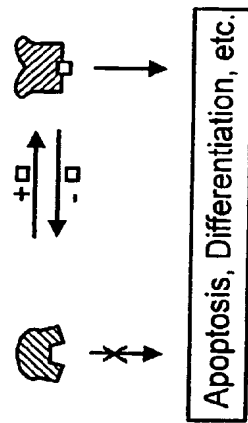
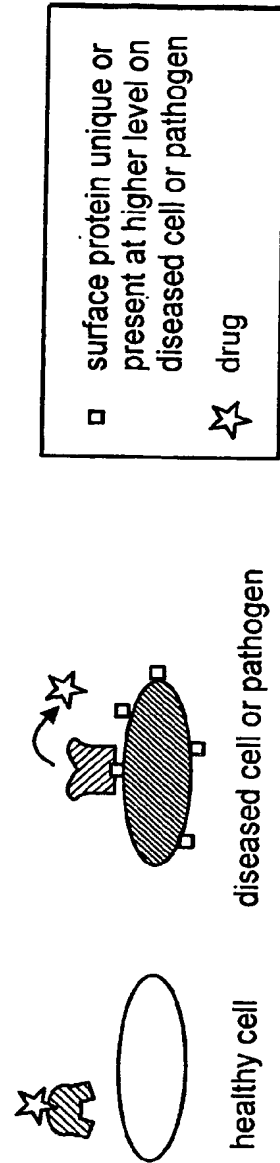


FIG. 5C Targeted Drug Delivery



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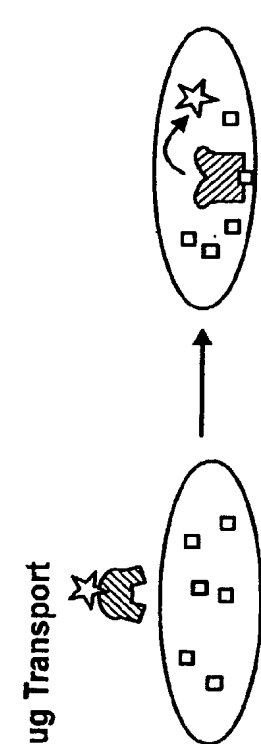
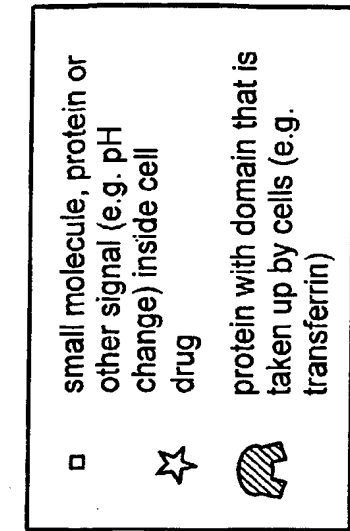


FIG. 5D Drug Transport

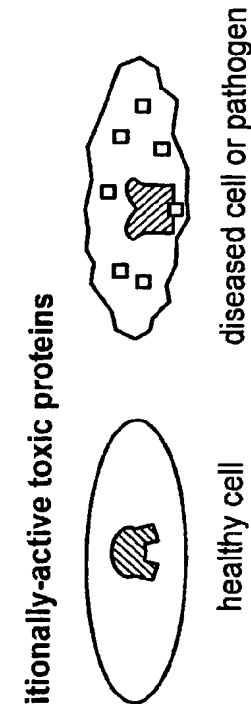
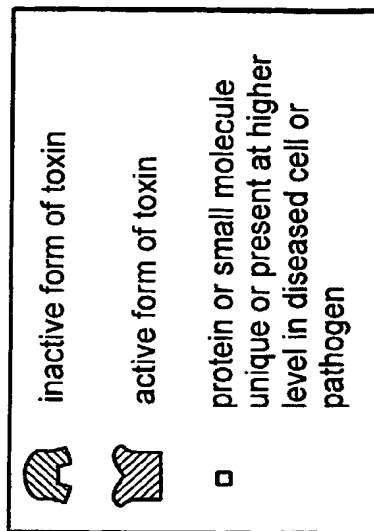


FIG. 5E Conditionally-active toxic proteins



FIG. 5F Metabolic Engineering

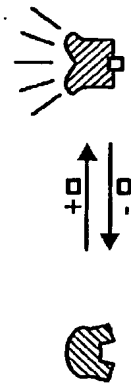


FIG. 5G Biosensors

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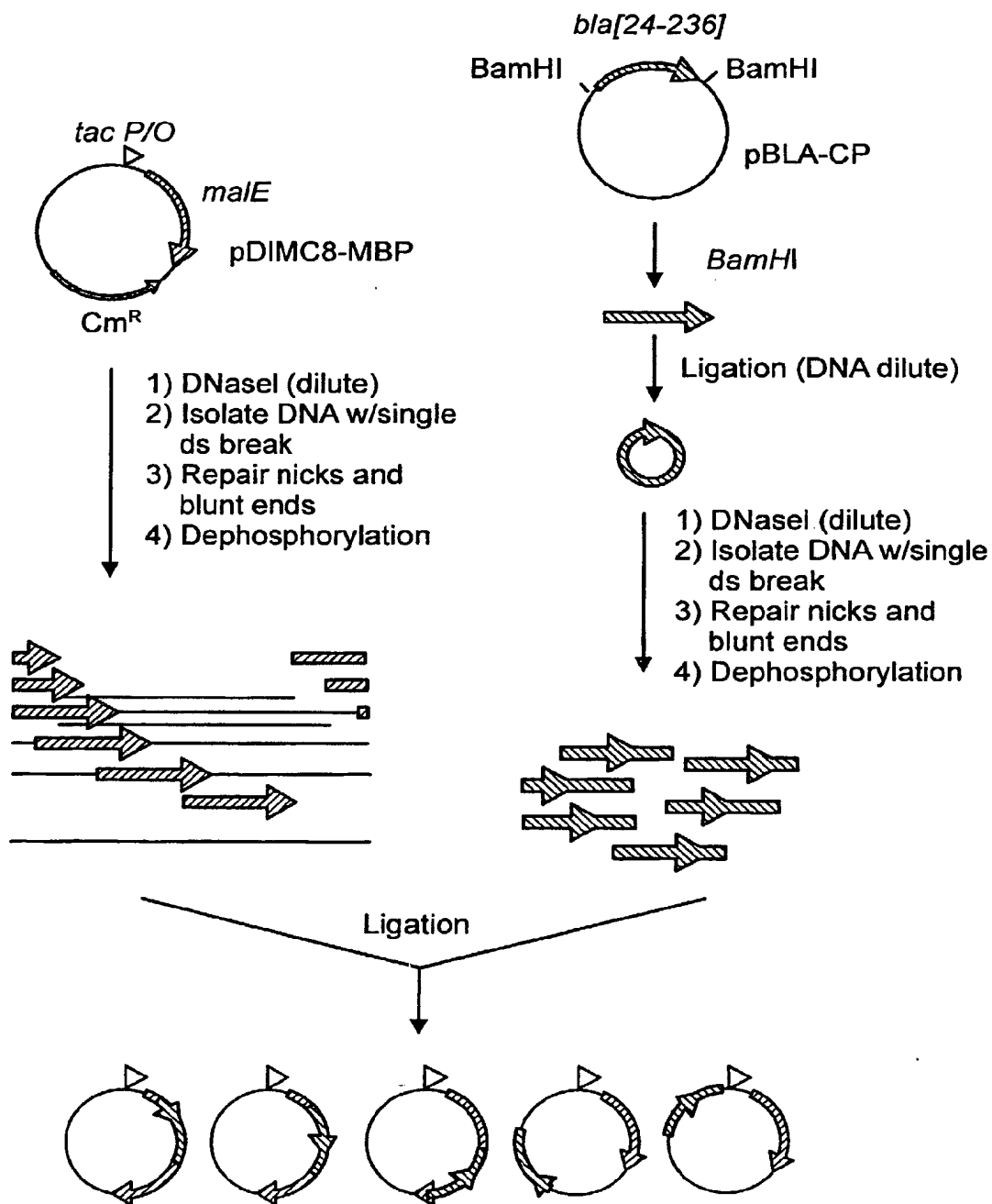


FIG. 6A

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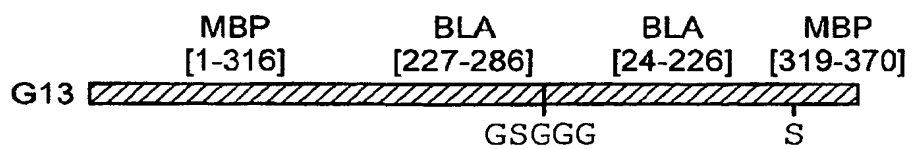


FIG. 6B

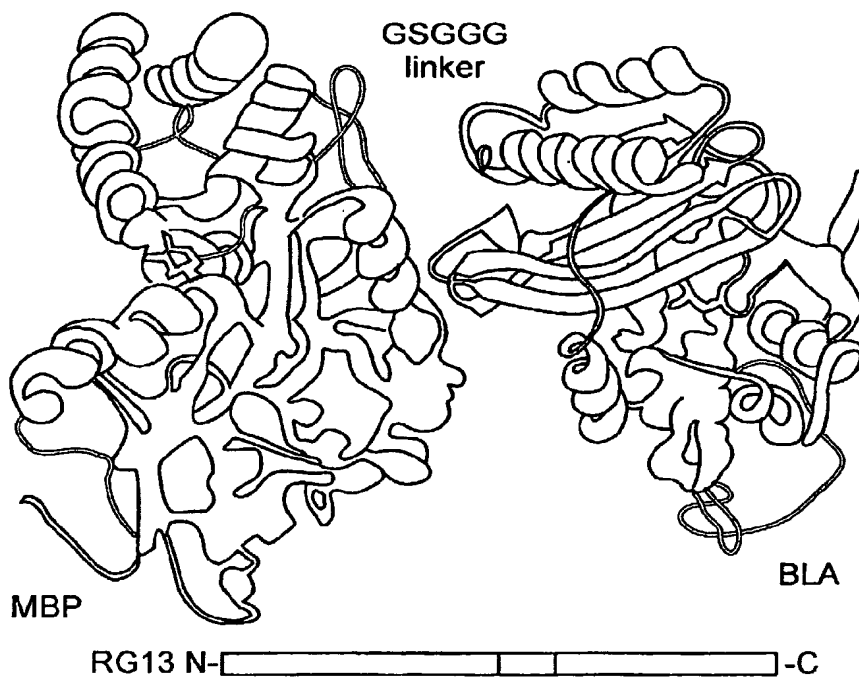


FIG. 6C



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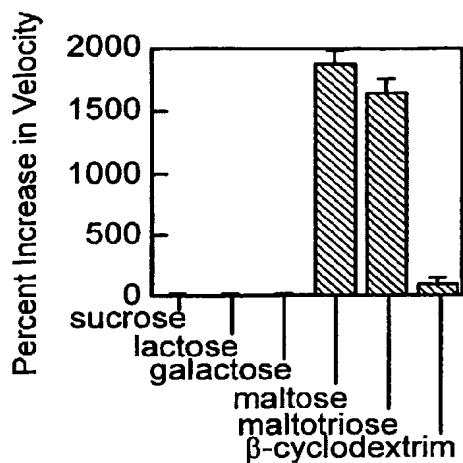


FIG. 7A

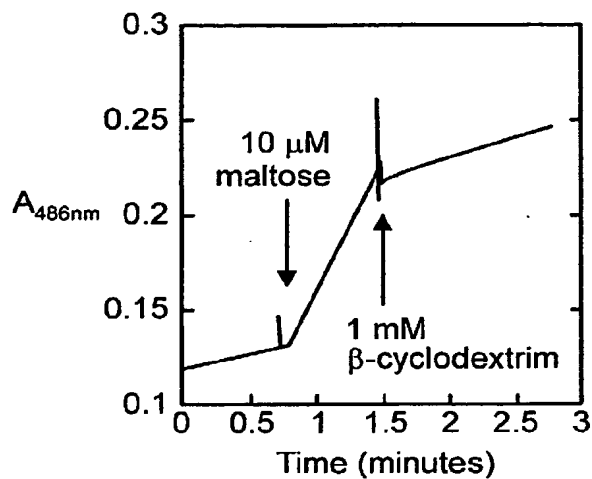


FIG. 7B

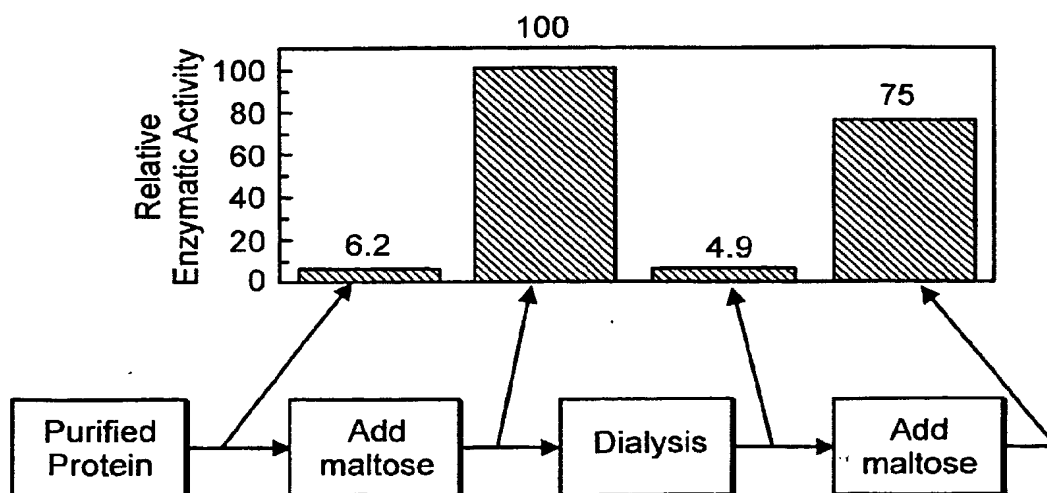


FIG. 7C

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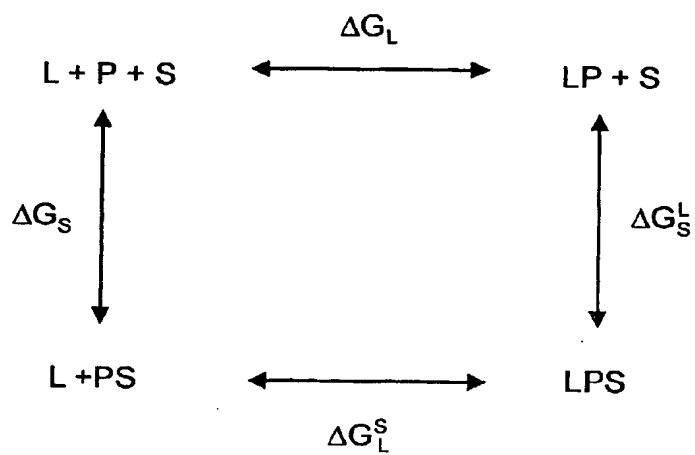


FIG. 8

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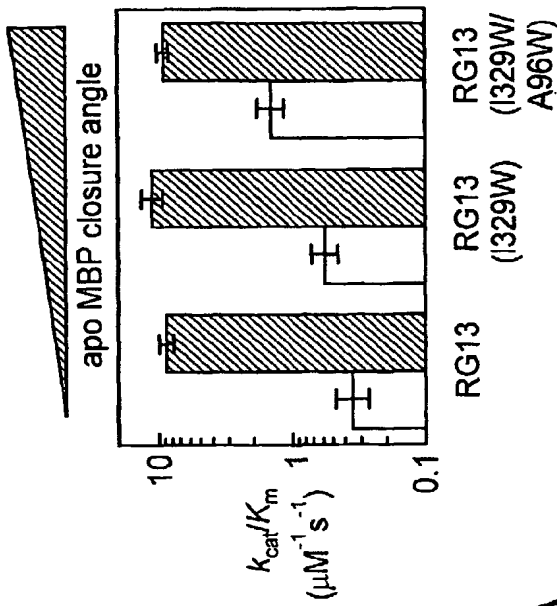


FIG. 9B

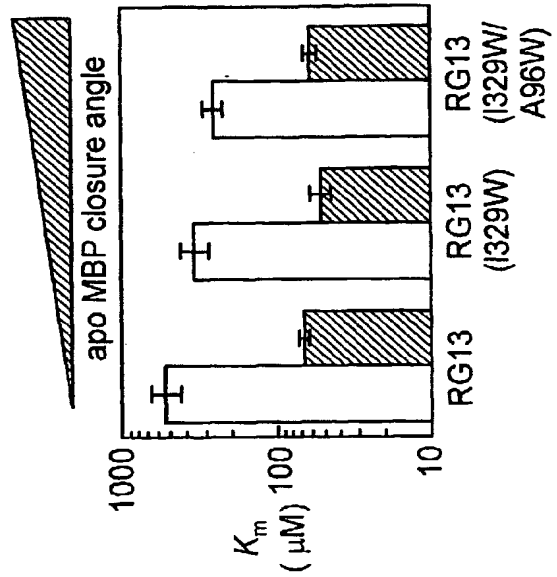


FIG. 9D

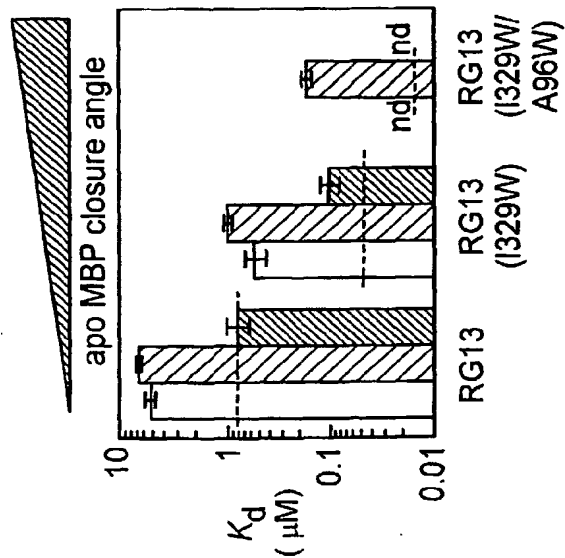


FIG. 9A

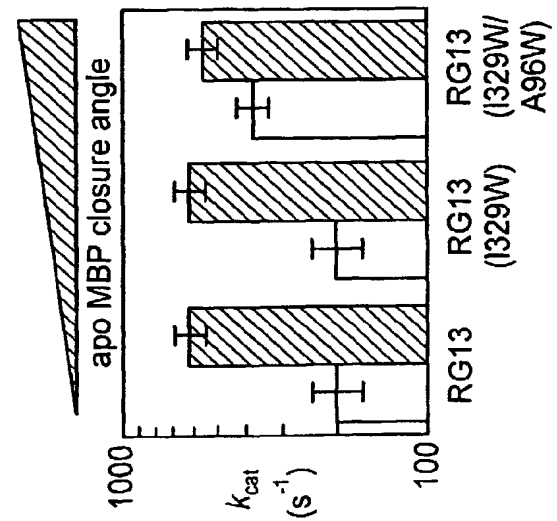


FIG. 9C

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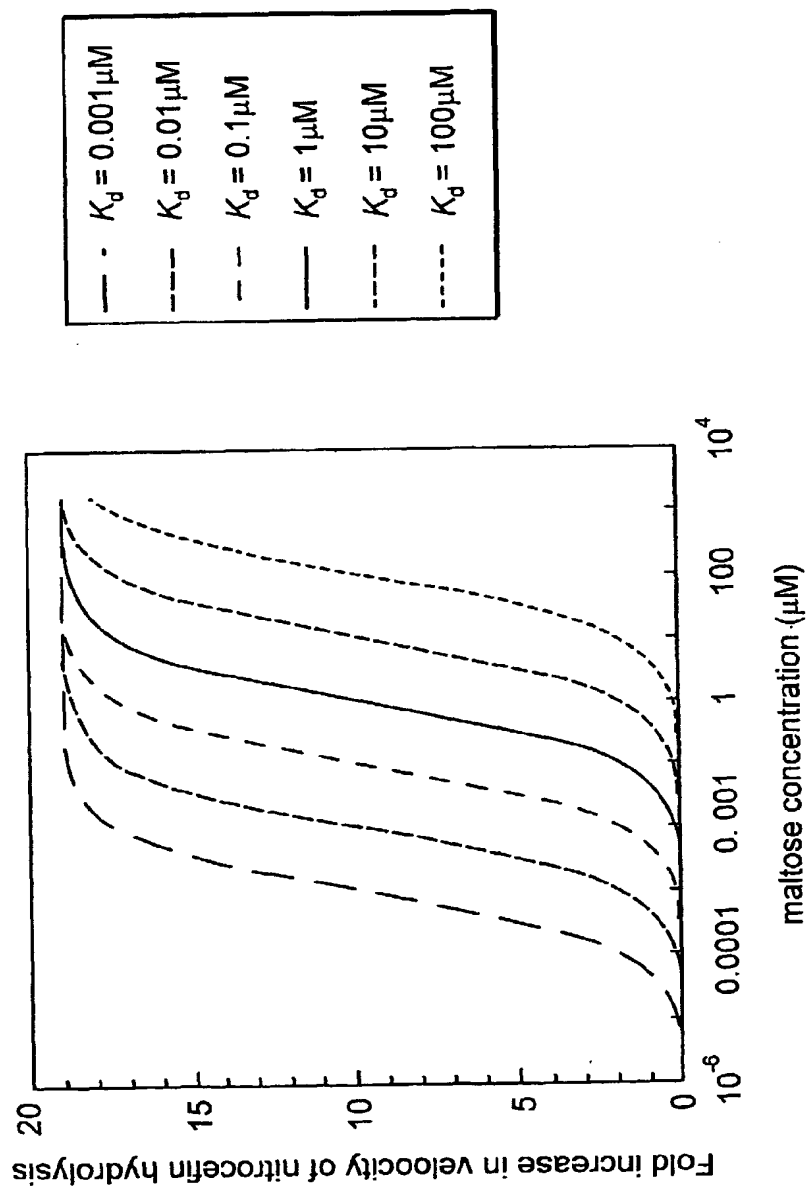


FIG. 10

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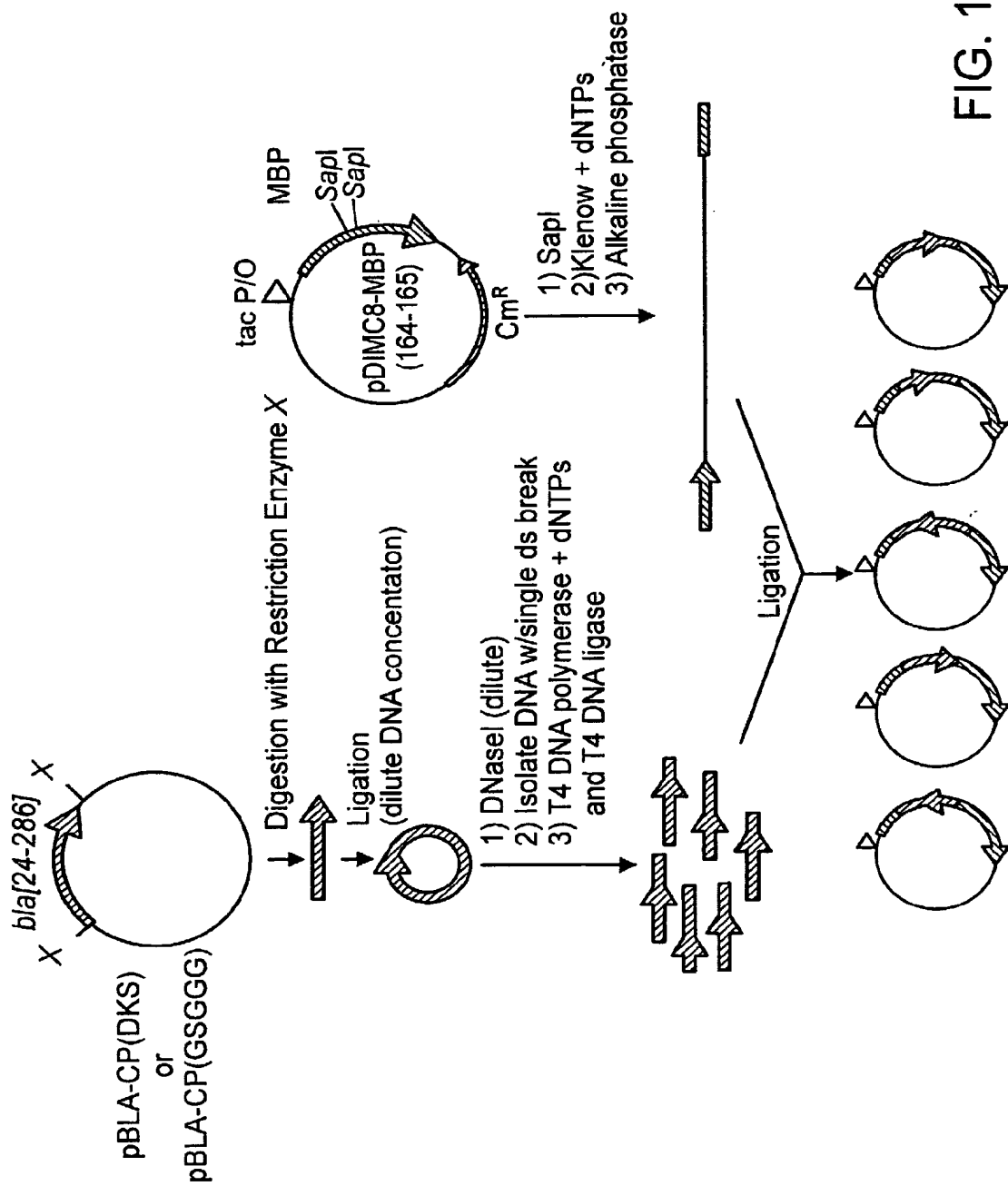
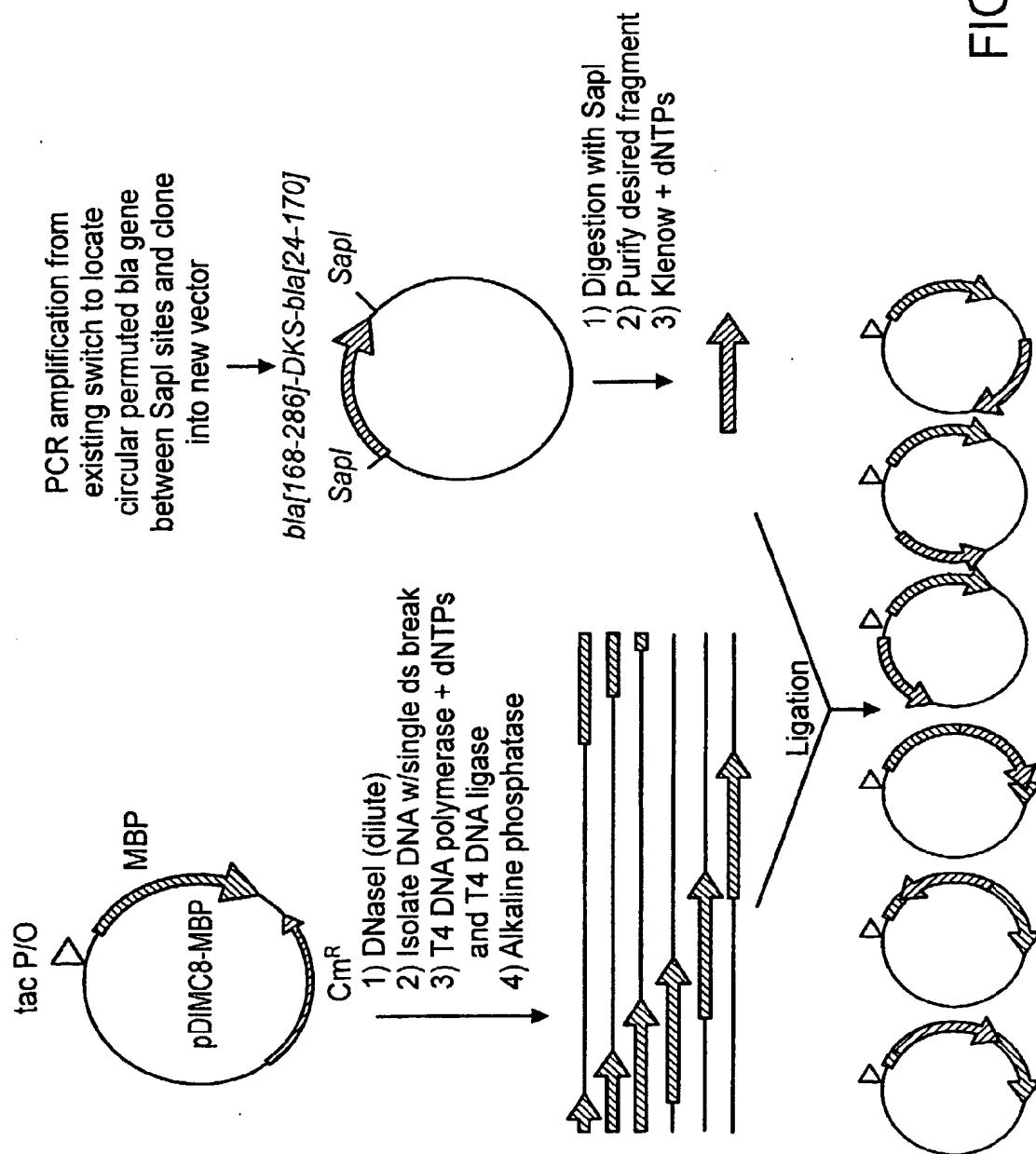
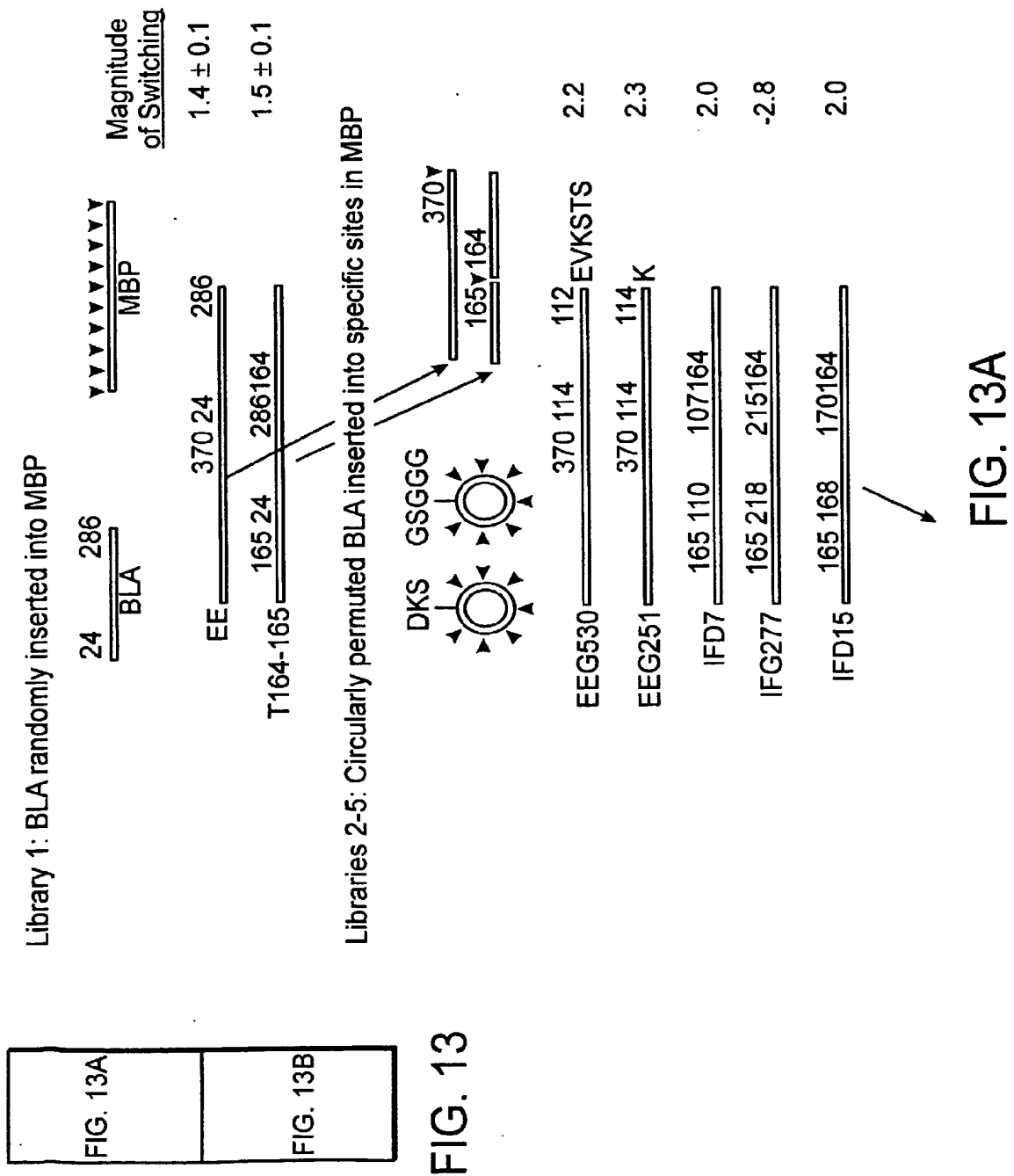


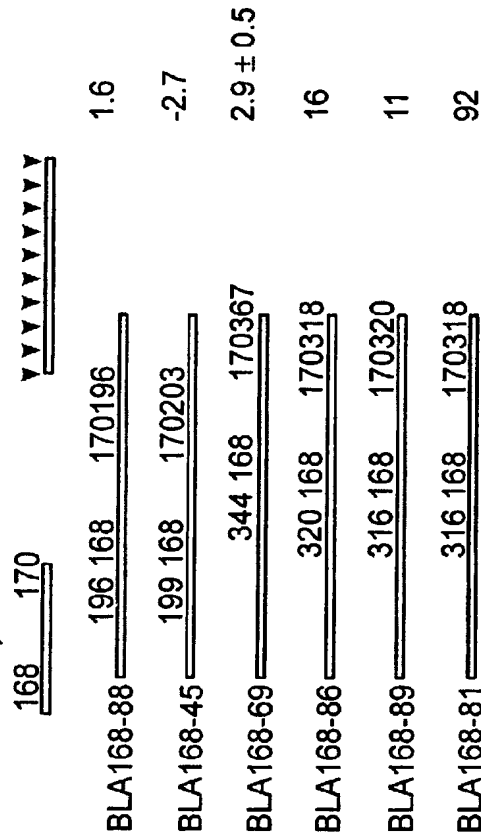
FIG. 11

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Library6: A specific circularly permuted BLA randomly inserted into MBP



Library7: Circularly permuted BLA inserted into a specific site in MBP

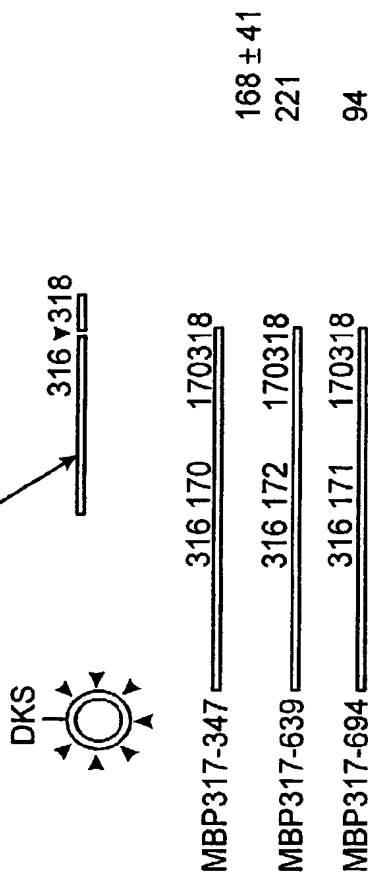


FIG. 13B

Key: MBP[1-316]-BLA[172-286]-DKS-BLA[24-170]-MBP[318-370]  
numbers are amino acid number of starting protein



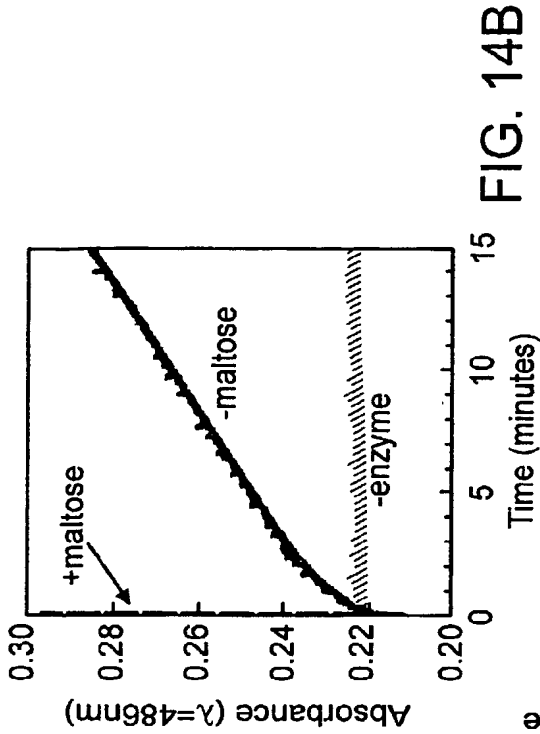


FIG. 14B

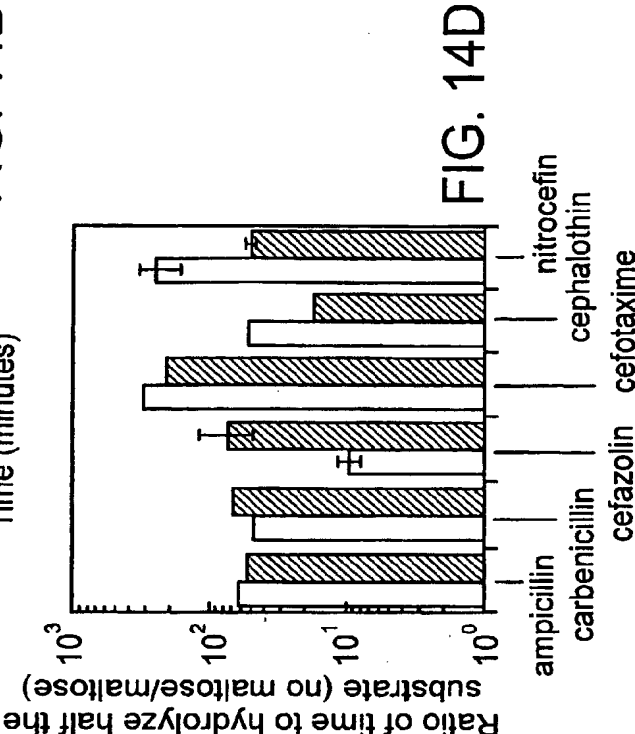


FIG. 14D

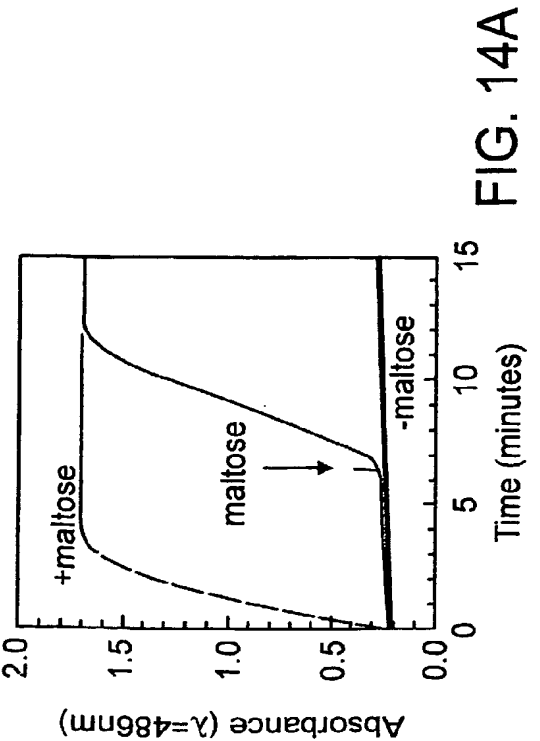


FIG. 14A

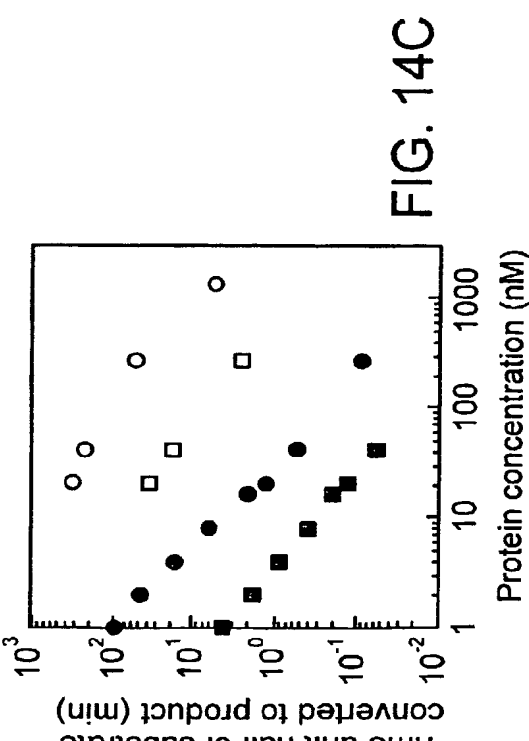


FIG. 14C

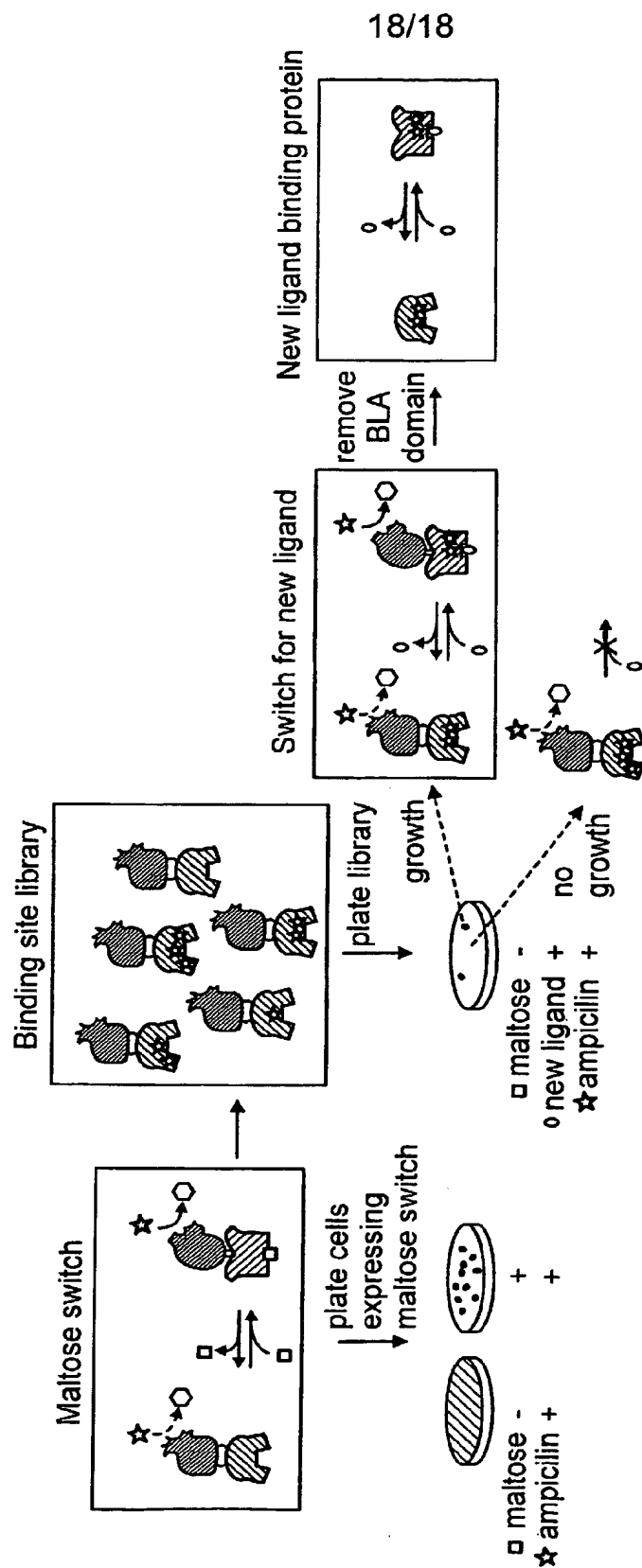


FIG. 15